MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Identification of the substance/preparation 53464 Black Pigment
Use of the substance/preparation Inkjet printing
Issue date 23-Feb-2023
Version # 01
CAS # Mixture
Company identification Primera Technology
Two Carlson Parkway North
Suite 375
Plymouth, MN 55447

Health effects line
(Toll-free within the US) 1-800-457-4209
(Direct) 1-760-710-0048
Customer Care Line
(Toll-free within the US) 1-800-474-6836
(Direct) 1-208-323-2551
Email: support@primera.com

2. HAZARDS IDENTIFICATION

GHS label elements
Signal word None.
Hazard symbols None.
Hazard statement None.
Precautionary statement
Prevention None.
Response None.
Storage None.
Disposal None.
Physical hazards Not classified as a physical hazard.
Health hazards Not classified as a health hazard.
Environmental hazards Not classified as an environmental hazard.

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS #</th>
<th>Percent</th>
<th>EC-No.</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>70-80</td>
<td>231-791-2</td>
<td></td>
</tr>
<tr>
<td>2-pyrlolodone</td>
<td>616-45-5</td>
<td>&lt; 15</td>
<td>210-483-1</td>
<td>Xi;R36</td>
</tr>
<tr>
<td>Cyclo Amide</td>
<td>Proprietary</td>
<td>&lt; 10</td>
<td>Proprietary</td>
<td></td>
</tr>
<tr>
<td>Carbon black</td>
<td>1333-86-4</td>
<td>&lt; 5</td>
<td>215-609-9</td>
<td></td>
</tr>
</tbody>
</table>

Composition comments This ink supply contains an aqueous ink formulation.
For the full text of the R phrases mentioned in this Section, see Section 16. Carbon black is present only in a bound form in this preparation.

4. FIRST AID MEASURES

Inhalation Remove to fresh air. If symptoms persist, get medical attention.
Skin contact  
Wash affected areas thoroughly with mild soap and water. Get medical attention if irritation develops or persists.

Eye contact  
Do not rub eyes. Immediately flush with large amounts of clean, warm water (low pressure) for at least 15 minutes or until particles are removed. If irritation persists get medical attention.

Ingestion  
If ingestion of a large amount does occur, seek medical attention.

5. FIRE-FIGHTING MEASURES

Flash point  
> 230.0 °F (> 110.0 °C) Pensky-Martens Closed Cup

Suitable extinguishing media  
For small (incipient) fires, use media such as foam, sand, dry chemical, or carbon dioxide. For large fires use very large (flooding) quantities of water and/or foam, applied as a mist or spray.

Extinguishing media which must not be used for safety reasons  
None known.

Unusual fire & explosion hazards  
None known.

Specific fire fighting methods  
Refer to section 10.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions  
Wear appropriate personal protective equipment.

Environmental precautions  
Do not let product enter drains. Do not flush into surface water or sanitary sewer system.

Methods for cleaning up  
Soak up with inert absorbent material.

7. HANDLING AND STORAGE

Handling  
Avoid contact with skin, eyes and clothing.

Storage  
Keep out of the reach of children. Keep away from excessive heat or cold.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limits

<table>
<thead>
<tr>
<th>Colombia. OELs. Resolution No. 02400: Norms Concerning Working Conditions, Health and Safety in the Workplace</th>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon black (CAS 1333-86-4)</td>
<td>TWA</td>
<td>3 mg/m3</td>
<td>Inhalable fraction.</td>
<td></td>
</tr>
</tbody>
</table>

US. ACGIH Threshold Limit Values

<table>
<thead>
<tr>
<th>Components</th>
<th>Type</th>
<th>Value</th>
<th>Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon black (CAS 1333-86-4)</td>
<td>TWA</td>
<td>3 mg/m3</td>
<td>Inhalable fraction.</td>
</tr>
</tbody>
</table>

Biological limit values  
No biological exposure limits noted for the ingredient(s).

Recommended monitoring procedures

Additional exposure data  
Exposure limits have not been established for this product.

Engineering measures to reduce exposure  
Use in a well ventilated area.

Personal protective equipment

Skin and body protection  
Not available.

General  
Use personal protective equipment to minimize exposure to skin and eye.

Hygiene measures  
Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

<table>
<thead>
<tr>
<th>Physical state</th>
<th>Liquid.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Black.</td>
</tr>
</tbody>
</table>

Odor  
Not available.

pH  
7.5 - 9
Melting point/Freezing point: Not available.
Boiling point, initial boiling point, and boiling range: Not available.
Flash point: > 230.0 °F (> 110.0 °C) Pensky-Martens Closed Cup
Auto-ignition temperature: Not available.
Flammability limit - lower (%): Not available.
Flammability limit - upper (%): Not available.
Vapor pressure: Not available.
Specific gravity: Not available.
Solubility(ies): Not available.
Solubility (water): Not available.
Partition coefficient (n-octanol/water): Not available.
Decomposition temperature: Not available.
Other data:
Oxidizing properties: Not determined
VOC (Weight %): < 229 g/L

10. STABILITY AND REACTIVITY

Conditions to avoid: Not available.
Hazardous decomposition products: Upon decomposition, this product may yield gaseous nitrogen oxides, carbon monoxide, carbon dioxide and/or low molecular weight hydrocarbons.
Stability: Stable under recommended storage conditions.
Materials to avoid: Incompatible with strong bases and oxidizing agents.
Hazardous polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute toxicity: Based on available data, the classification criteria are not met.
Skin corrosion/irritation: Based on available data, the classification criteria are not met.
Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.
Respiratory or skin sensitization:
Skin sensitization: Based on available data, the classification criteria are not met.
Respiratory sensitization: Based on available data, the classification criteria are not met.
Carcinogenicity: Based on available data, the classification criteria are not met.

Carbon black is classified as a carcinogen by the IARC (possibly carcinogenic to humans, Group 2B) and by the State of California under Proposition 65. In their evaluations of carbon black, both organizations indicate that exposure to carbon black, per se, does not occur when it remains bound within a product matrix, specifically, rubber, ink, or paint. Carbon black is present only in a bound form in this preparation.

Colombia. OELs. Resolution No. 02400: Norms Concerning Working Conditions, Health and Safety in the Workplace
Carbon black (CAS 1333-86-4) A3 Animal carcinogen.

IARC Monographs. Overall Evaluation of Carcinogenicity
Carbon black (CAS 1333-86-4) 2B Possibly carcinogenic to humans.

Germ cell mutagenicity: Based on available data, the classification criteria are not met.
Toxic to reproduction: Based on available data, the classification criteria are not met.
Specific target organ toxicity - single exposure: Based on available data, the classification criteria are not met.
Specific target organ toxicity - repeated exposure: Based on available data, the classification criteria are not met.
Aspiration hazard: Based on available data, the classification criteria are not met.
Other information
Complete toxicity data are not available for this specific formulation. Refer to Section 2 for potential health effects and Section 4 for first aid measures.

Toxicological data

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-pyrrolidone (CAS 616-45-5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Guinea pig</td>
<td>6500 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Rat</td>
<td>6500 mg/kg</td>
</tr>
<tr>
<td>Carbon black (CAS 1333-86-4)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50</td>
<td>Rat</td>
<td>&gt; 8000 mg/kg</td>
</tr>
</tbody>
</table>

12. ECOLOGICAL INFORMATION

Ecotoxicological data

<table>
<thead>
<tr>
<th>Components</th>
<th>Species</th>
<th>Test Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-pyrrolidone (CAS 616-45-5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aquatic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Crustacea</td>
<td>EC50</td>
<td>Water flea (Daphnia pulex)</td>
</tr>
</tbody>
</table>

Ecotoxicity
This product has not been tested for ecological effects.

Environmental effects
Not available.

Persistence / degradability
Not available.

Bioaccumulation

Bioaccumulative potential
Octanol/water partition coefficient log Kow
2-pyrrolidone | -0.85 |

Aquatic toxicity
This product has not been tested for ecological effects.

Mobility
Not available.

13. DISPOSAL CONSIDERATIONS

Disposal instructions
Do not allow this material to drain into sewers/water supplies. Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations. HP's Planet Partners (trademark) supplies recycling program enables simple, convenient recycling of HP original inkjet and LaserJet supplies. For more information and to determine if this service is available in your location, please visit http://www.hp.com/recycle.

14. TRANSPORT INFORMATION

DOT
Not regulated as dangerous goods.

IATA
Not regulated as dangerous goods.

IMDG
Not regulated as dangerous goods.

ADR
Not regulated as dangerous goods.

Further information
Not a dangerous good under DOT, IATA, ADR, IMDG, or RID.

15. REGULATORY INFORMATION

Labeling

R-phrase(s) None.
S-phrase(s) S24/25 Avoid contact with skin and eyes.
All chemical substances in this HP product have been notified or are exempt from notification under chemical substances notification laws in the following countries: US (TSCA), EU (EINECS/ELINCS), Switzerland, Canada (DSL/NDSL), Australia, Japan, Philippines, South Korea, New Zealand, and China.

**Kyoto protocol**
- Not applicable.

**Montreal Protocol**
- Not applicable.

**Rotterdam Convention**
- Not applicable.

**Stockholm Convention**
- Not applicable.

### 16. OTHER INFORMATION

**Wording of the R-phrases in sections 2 and 3**
- R36 Irritating to eyes.

**Disclaimer**
This Safety Data Sheet document is provided without charge to customers of Hewlett-Packard Company. Data is the most current known to Hewlett-Packard Company at the time of preparation of this document and is believed to be accurate. It should not be construed as guaranteeing specific properties of the products as described or suitability for a particular application. This document was prepared to the requirements of the jurisdiction specified in Section 1 above and may not meet regulatory requirements in other countries.

**Prepared by**
Hewlett-Packard Company

**Issue date**
23-Feb-2023

**Version #**
01

**This data sheet contains changes from the previous version in section(s):**
1. Product and Company Identification: Alternate Trade Names
2. Composition / Information on Ingredients: Ingredients
3. Physical & Chemical Properties: Multiple Properties

**Manufacturer information**
Hewlett-Packard Company
3000 Hanover Street
Palo Alto, California 94304-1112 US
Direct 1-650-857-5020

**Explanation of abbreviations**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH</td>
<td>American Conference of Governmental Industrial Hygienists</td>
</tr>
<tr>
<td>CAS</td>
<td>Chemical Abstracts Service</td>
</tr>
<tr>
<td>CERCLA</td>
<td>Comprehensive Environmental Response Compensation and Liability Act</td>
</tr>
<tr>
<td>CFR</td>
<td>Code of Federal Regulations</td>
</tr>
<tr>
<td>COC</td>
<td>Cleveland Open Cup</td>
</tr>
<tr>
<td>DOT</td>
<td>Department of Transportation</td>
</tr>
<tr>
<td>EPCRA</td>
<td>Emergency Planning and Community Right-to-Know Act (aka SARA)</td>
</tr>
<tr>
<td>IARC</td>
<td>International Agency for Research on Cancer</td>
</tr>
<tr>
<td>NIOSH</td>
<td>National Institute for Occupational Safety and Health</td>
</tr>
<tr>
<td>NTP</td>
<td>National Toxicology Program</td>
</tr>
<tr>
<td>OSHA</td>
<td>Occupational Safety and Health Administration</td>
</tr>
<tr>
<td>PEL</td>
<td>Permissible Exposure Limit</td>
</tr>
<tr>
<td>RCRA</td>
<td>Resource Conservation and Recovery Act</td>
</tr>
<tr>
<td>REC</td>
<td>Recommended</td>
</tr>
<tr>
<td>REL</td>
<td>Recommended Exposure Limit</td>
</tr>
<tr>
<td>SARA</td>
<td>Superfund Amendments and Reauthorization Act of 1986</td>
</tr>
<tr>
<td>STEL</td>
<td>Short-Term Exposure Limit</td>
</tr>
<tr>
<td>TCLP</td>
<td>Toxicity Characteristics Leaching Procedure</td>
</tr>
<tr>
<td>TLV</td>
<td>Threshold Limit Value</td>
</tr>
<tr>
<td>TSCA</td>
<td>Toxic Substances Control Act</td>
</tr>
<tr>
<td>VOC</td>
<td>Volatile Organic Compounds</td>
</tr>
</tbody>
</table>